DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/Ala Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-006736 Address: 333 Burma Road **Date Inspected:** 07-May-2009

City: Oakland, CA 94607

OSM Arrival Time: 1845 **Project Name:** SAS Superstructure **OSM Departure Time:** 645 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Zhong An Liu, Tu Jun, Li Lei, Yo C Wil Cresent: Yes No

Inspected CWI report: Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No N/A

Yes No **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Tower and OBG Components

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 5

This QA Inspector, George Goulet, proceeded to Bay 5 in response to a ZPMC notification of witness inspection #2974 for MT inspection as follows:

This QA Inspector, George Goulet, performed random VT and then MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector, George Goulet, generated an MT report for this date. The member is identified as 21TR4-003. The weld designations reviewed are as follows: 001~008.

This QA Inspector, George Goulet, performed random VT and then MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector, George Goulet, generated an MT report for this date. The member is identified as 21TR4-004. The weld designations reviewed are as follows: 001~008.

This QA Inspector, George Goulet, performed random VT and then MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector, George Goulet, generated an MT report for this date. The member is identified as 21TR4-001. The weld designations reviewed are as follows: 001~008.

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This QA Inspector, George Goulet, performed random VT and then MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector, George Goulet, generated an MT report for this date. The member is identified as 21TR4-002. The weld designations reviewed are as follows: 001~008.

This QA Inspector, George Goulet, performed random VT and then MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector, George Goulet, generated an MT report for this date. The member is identified as 21TR3-001. The weld designations reviewed are as follows: 001~008.

This QA Inspector, George Goulet, performed random VT and then MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector, George Goulet, generated an MT report for this date. The member is identified as 21TR3-002. The weld designations reviewed are as follows: 001~008.

This QA Inspector, George Goulet, performed random VT and then MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector, George Goulet, generated an MT report for this date. The member is identified as 21TR1-001. The weld designations reviewed are as follows: 001~008.

This QA Inspector, George Goulet, performed random VT and then MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector, George Goulet, generated an MT report for this date. The member is identified as 21TR1-002. The weld designations reviewed are as follows: 001~008.

Bay 6

This QA Inspector, George Goulet, proceeded to Bay 5 in response to a ZPMC notification of witness inspection #2963 to perform MT inspection as follows:

This QA Inspector, George Goulet, performed random VT and then MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector, George Goulet, generated an MT report for this date. The member is identified as SP201-010. The weld designations reviewed are as follows: 001~012.

Bay 10

This QA Inspector, George Goulet, randomly observed the following work in progress in Bay 10:

FCAW welding, using the northwest gantry, of weld joints NSD1-FASA3-1G/G-10, 11, 42, 43 located on PCMK north tower, lift 3, skin A. Welders were identified respectively as 048378, 053869, 040345, 048784. ZPMC QC was identified as CWI Zhong An Liu (QC1). The welding variables recorded by QC1 appeared to comply with WPS-B-T-2332-Tc-P5-F. Also at this location and appearing to be monitoring the welding and recording data was ABF Representative Ma Zhen Yi.

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FCAW welding of weld joint SSD1-FDSA3-1C/C-28 located on PCMK south tower, lift 3, skin D. Welder was identified as 040338. ZPMC QC was identified as CWI Tu Jun (QC2). Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Li Peng Fei, who was not a CWI. The welding variables recorded by QC2 and his assistant appeared to comply with WPS-B-T-4331-Tc-P4-F. Also at this location and appearing to be monitoring the welding and recording data was ABF Representative Yang Yi Heng.

Bay 11

This QA Inspector, George Goulet, randomly observed the following work in progress in Bay 11:

Fitting and SMAW tack welding of weld joints WSD1-FASA3-2B/C-52A, 52B located on PCMK west tower, lift 3, skin A. Welders were identified respectively as 255865, 206195. ZPMC QC was identified as CWI Li Lei (QC3). Assisting QC3 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Tao Lu Hai, who was not a CWI. The welding variables recorded by QC3 and his assistant appeared to comply with WPS-B-P-2212-Tc-U5b.

Fitting and SMAW tack welding of weld joint ESD1-ESTL34B/K-81B located on PCMK east tower, lift 3, skins A to B. Welder was identified as 203787. ZPMC QC was identified as CWI You Qi Guo (QC4). Assisting QC4 at this location and appearing to be monitoring the welding and recording data was ZPMC CAWI Liu Dao Feng. The welding variables recorded by QC4 and his assistant appeared to comply with WPS-B-P-2212-Tc-U5b.

Summary of Conversations:

This QA Inspector, George Goulet, asked each QC if all the welding variables observed by him appeared to comply with the appropriate WPS, including the preheat requirements according to thickness of the thickest member being welded. Each QC showed this QA Inspector, George Goulet, that he was carrying the proper temperature sticks to monitor the minimum and maximum preheat and interpass temperatures and replied that all he observed did appear to comply.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod, 134-8257-0045, who represents the Office of Structural Materials for your project.

Inspected By:	Goulet,George	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer